

ABSTRACTProcess for forming a protective coating containing aluminium and zirconium on a metal

This relates to an improvement to the process of aluminization or activated cementation in which a donor cement containing the aluminium is attacked at high temperature and in a neutral or reducing atmosphere by a gaseous ammonium halide to form a gaseous aluminium halide which decomposes on contact with a nickel-based substrate depositing aluminium metal thereon.

According to the invention the aluminium halide is at least partly replaced by a zirconium halide leading to the inclusion of zirconium in the deposit.

Improvement in the protection of the hot parts of aircraft engines made of nickel-based superalloy.

No figure is to be published.